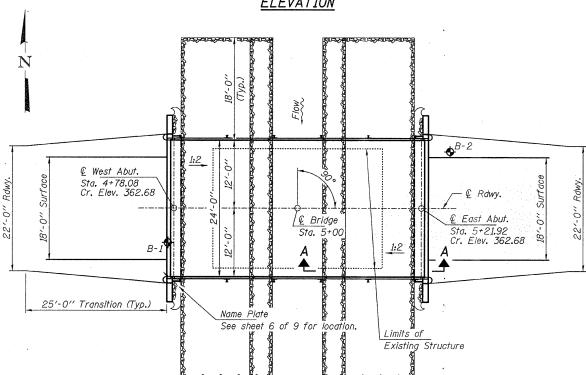
BENCHMARK: Iron Pin, Sta. ±2.24.42, 15.96' Lt., Elev. 362.87 EXISTING STRUCTURE: Sta. 5+00 - Single span concrete deck beam bridge with concrete abutments & wingwalls on timber piles. 30.0 bk.- bk. abuts.; 21.0' o.-o. deck. Structure closed to traffic. 46'-4" Bk. - Bk. Abuts. No Salvage 100 Yr. H.W. Elev. 360.38 Steel Railing, Type S1 15 Yr. H.W. Elev. 360.01 Curled End Sections (Typ.) See sheets 4 & 5 of 9 for details. See sheet 5 of 9 for details. 0.00% Berm Elev. 360.0 (Typ.) Metal Shell Piles 12"x0,250" (Typ.) Æ Elev. 353.9 Stone Dumped Riprap Channel Excavation (Typ.) Class A4 (Typ.) 43'-10" € - € Piles ELEVATION



PLAN

DESIGN STRESSES

FIELD UNITS

DESIGNED - A.S.L

CHECKED - S.W.M.

CHECKED - D.T.M.

- D.A.B

DRAWN

f'c = 3,500 psi fy = 60,000 psi (Reinf.)

PRECAST PRESTRESSED UNITS

f'c = 6,000 psi f'ci = 5,000 psi fpu = 270,000 psi ('2''\phi low lax. strands) fpbt = 201,960 psi ('2''\phi low lax. strands) fy = 60,000 psi (Reinf.)

LOADING HL-93

Design Specifications: 2007 AASHTO LRFD with all applicable interims.
50#/Sq. Ft. included in dead load for future wearing surface.

SEISMIC DATA

Seismic Performance Zone (SPZ) = 3 Design Spectral Acceleration at 1.0 sec. (S_{DI}) = 0.442g Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.850g Soil Site Class = E

WATERWAY INFORMATION

| Existing Low Grade Elev. 361.70 © Sta. 4+98.30 Drainage Area = 5.7 Sq. Mi. Proposed Low Grade Elev. 362.08 © Sta. 6+50.0 | | | | | | | | | | | | |
|---|-------|-------|-------------------|-----|--------|------|------|--------|--------|--|--|--|
| Flood | Freq. | | Opening Exist. | | | | | | | | | |
| Design | 15 | 655 | 104 | | 360.01 | | | | | | | |
| Base | 100 | 1,060 | 104 | 192 | 360.38 | 2.30 | 0.47 | 362.68 | 360.85 | | | |

GENERAL NOTES

Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at West Abutment or approved by the Engineer before ordering the remainder of piles.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.

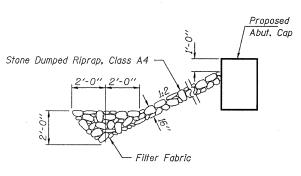
Excavation required to construct the Abutments shall be included in the cost of Concrete Structures. No additional compensation will be allowed for Structure Excavation.

All proposed construction activities shall be in accordance with Nationwide Permit number 14 of the Department of the Army authorized under Section 404 of the Clean Water Act.

The IEPA has issued Section 401 Water Quality Certification for this activity. See Special Provisions for conditions. See sheets 8 & 9 of 9 for Borings.

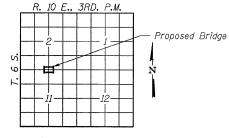
BUILT 200_ BY WHITE COUNTY SEC. 07-03119-00-BR EMMA ROAD DISTRICT STR. NO. 097-3265 LOADING HL-93

NAME PLATE See Std. 515001



SECTION A-A

Note: See Special Provisions for Stone Dumped Riprap, Class A4



LOCATION SKETCH

TOTAL BILL OF MATERIAL

| ITEM | UNIT | SUPER | SUB | TOTAL | | | | | |
|---|---------|-------|-------|-------|--|--|--|--|--|
| Channel Excavation | Cu. Yd. | | | 90 | | | | | |
| Stone Dumped Riprap, Class A4 | Ton | | | 180 | | | | | |
| Removal of Existing Structures | Each | | | 1 | | | | | |
| Concrete Structures | Cu. Yd. | | 21.0 | 21.0 | | | | | |
| Concrete Encasement | Cu. Yd. | | 3.6 | 3.6 | | | | | |
| Precast Prestressed Concrete Deck Beams (17" Depth) | Sq. Ft. | 1,080 | | 1,080 | | | | | |
| Reinforcement Bars | Pound | | 2,450 | 2,450 | | | | | |
| Steel Railing, Type S1 | Foot | 88 | | 88 | | | | | |
| Furnishing Metal Shell Piles 12" x 0.250" | Foot | | 345 | 345 | | | | | |
| Test Pile Metal Shells | Each | | 1 | 1 | | | | | |
| Name Plates | Each | | 1 | 1 | | | | | |

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO LRFD Specifications."

Sturn Migginson 2/20/2009 ILLINOIS STRUCTURAL NO. 081-6064



Expires 11-30-10

GENERAL PLAN AND ELEVATION STRUCTURE NO. 097-3265

HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS
LAND SURVEYORS

3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 (217) 546-3400

PROJECT NUMBER: 08.0256.130 DATE: 02/25/09

SHEET NO. 1 9 SHEETS

TOTAL SHEET NO. T.R. SECTION COUNTY 269 07-03119-00-BR 12 4 WHITE EMMA ROAD DISTRICT CONTRACT NO. 99370 FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT BROS-193(35)